

L Number	Hits	Search Text	DB	Time stamp
1	118	hydrogen same gas same (bacteria or bacterium) same (growth or grow or grows)	USPAT; US-PGPUB	2003/01/15 09:09
2	9	hydrogen same gas same (bacteria or bacterium) same (growth or grow or grows) same soil	USPAT; US-PGPUB	2003/01/15 09:11
3	256	hydrogen same gas same (bacteria or bacterium) same (growth or grow or grows)	USOCR	2003/01/15 09:12
4	53	hydrogen same gas same (bacteria or bacterium) same (growth or grow or grows) same soil	USOCR	2003/01/15 09:19
5	4	hydrogen and gas and (bacteria or bacterium) and (growth or grow or grows) and soil	EPO; JPO; DERWENT	2003/01/15 09:25

```

show files;ds
File 9:Business & Industry(R) Jul/1994-2003/Jan 14
      (c) 2003 Resp. DB Svcs.
File 16:Gale Group PROMT(R) 1990-2003/Jan 15
      (c) 2003 The Gale Group
File 18:Gale Group F&S Index(R) 1988-2003/Jan 15
      (c) 2003 The Gale Group
File 19:Chem. Industry Notes 1974-2003/ISS 200302
      (c) 2003 Amer.Chem.Soc.
File 20:Dialog Global Reporter 1997-2003/Jan 15
      (c) 2003 The Dialog Corp.
File 50:CAB Abstracts 1972-2003/Dec
      (c) 2003 CAB International
File 54:FOODLINE(R): Market Data 1972-2003/JAN 9
      (c) 2003 LFRA
File 79:Foods Adlibra(TM) 1974-2002/Apr
      (c) 2002 General Mills
File 129:PHIND(Archival) 1980-2003/Jan W1
      (c) 2003 PJB Publications, Ltd.
File 130:PHIND(Daily & Current) 2003/Jan 15
      (c) 2003 PJB Publications, Ltd.
File 148:Gale Group Trade & Industry DB 1976-2003/Jan 14
      (c) 2003 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
      (c) 1999 The Gale Group
File 235:AGROProjects 1990- 2003/Q1
      (c) 2002 PJB Publications, Ltd.
File 248:PIRA 1975-2003/Jan W2
      (c) 2003 Pira International
File 252:Packaging Sci&Tech 1982-1997/Oct
      (c) 1997 by Fraunhofer-ILV, Germany
File 285:BioBusiness(R) 1985-1998/Aug W1
      (c) 1998 BIOSIS
File 481:DELPHES Eur Bus 95-2003/Jan W1
      (c) 2003 ACFCI & Chambre CommInd Paris
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
      (c) 2002 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Jan 14
      (c) 2003 The Gale Group
File 635:Business Dateline(R) 1985-2003/Jan 14
      (c) 2003 ProQuest Info&Learning
File 636:Gale Group Newsletter DB(TM) 1987-2003/Jan 15
      (c) 2003 The Gale Group

```

Set	Items	Description
S1	16450	(HYDROGEN OR H2) (3N) (GAS OR GASES OR GASEOUS)
S2	4090505	CROP OR CROPS OR PLANTS OR CORN OR SOYBEAN? OR SOY()BEAN? - OR WHEAT OR PEANUT? OR RYE
S3	766480	(INCREAS? OR IMPROV? OR ENHANCE? OR DOUBLE) (3N) (YIELD OR G- ROWTH OR OUTPUT OR OUT()PUT OR AMOUNT)
S4	14	S1(4N)S3
S5	2	S4 AND S2
S6	174	S1(3N)S2
S7	0	S6(5N)S3
S8	5	S6 AND S3
S9	5	RD (unique items)
S10	19892	HYDROGENAT?
S11	1	S10(4N) (CROP OR CROPS) (4N) (YIELD? OR GROW?)
?		

11/3,K/1 (Item 1 from file: 148)

DILOG(R)File 148:Gale Group Trade & Industry DB
(c)2003 The Gale Group. All rts. reserv.

09838240 . SUPPLIER NUMBER: 19702481 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Welcome to the brave new world of bioengineering. (controversies surrounding bioengineering) (includes related article on the cloned sheep Dolly) (Cover Story)

Demetrikakes, Pan

Food Processing, v58, n5, p24(6)

May, 1997

DOCUMENT TYPE: Cover Story ISSN: 0015-6523 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 3345 LINE COUNT: 00275

... DuPont soybeans bioengineered to be high in oleic acid, which means high oxidation resistance without *hydrogenation*; farmers are *growing* the first *crop* of those soybeans this year. DuPont also is developing bioengineered corn and soybeans high in...
?

2/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

03452613 INSPEC Abstract Number: A89110777

Title: **Methanol from biomass-a renewable fuel for Hawaii/US**

Author(s): Browne, S.; Neill, D.R.; De Almeida, C.; Phillips, V.; Xu, X.;
Takahashi, P.

Author Affiliation: Hawaii Natural Energy Inst., Hawaii Univ., Honolulu,
HI, USA

Conference Title: Solar 88. Proceedings of the 1988 Annual Meeting of the
American Solar Energy Society p.462-5

Editor(s): Coleman, M.J.

Publisher: American Solar Energy Soc, USA

Publication Date: 1988 Country of Publication: USA xx+583 pp.

ISBN: 0 89553 161 5

Conference Sponsor: American Meteorol. Soc.; ASME; et al

Conference Date: 20-24 June 1988 Conference Location: Cambridge, MA,
USA

Language: English

Subfile: A

...Abstract: transportation fuels in the near-term: the biofuel production program-production of a medium Btu *gas* and conversion to methanol from a feedstock of short-rotation tree and grass *crops*; the *hydrogen*-from-renewable energy program-enhancement of methanol *yield* by the addition of *hydrogen* which more than doubles methanol production; and the methanol demonstration program-performance and emissions testing...

2/3,K/2 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

06165858 BIOSIS NO.: 000086000040

ISOLATION AND CHARACTERIZATION OF RHIZOBIUM SPECIES AS NITROGEN FIXING

SYMBIONTS IN GUAR CYAMOPSIS-TETRAGONOLOBA L TAUB

AUTHOR: NAWAZ Z; AHMED N

AUTHOR ADDRESS: CENT. ADVANCED MOL. BIOL., UNIV. PUNJAB, NEW CAMPUS, LAHORE
- 20, PAKISTAN.

JOURNAL: PAK J ZOOL 19 (1). 1987. 9-16. 1987

FULL JOURNAL NAME: Pakistan Journal of Zoology

CODEN: PJZOA

RECORD TYPE: Abstract

LANGUAGE: ENGLISH

DESCRIPTORS: *CROP* *YIELD* STREPTOMYCIN RESISTANCE SUGAR FERMENTATION

GAS PRODUCTION *HYDROGEN* SULFIDE PRODUCTION

2/3,K/3 (Item 1 from file: 6)

DIALOG(R)File 6:NTIS

(c) 2003 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.

0658655 NTIS Accession Number: UCRL-50044-76-1/XAB

Imperial Valley Environmental Project: Progress Report

Phelps, P. L. ; Anspaugh, L. R.

California Univ., Livermore. Lawrence Livermore Lab.

Corp. Source Codes: 9500007

Sponsor: Energy Research and Development Administration.

19 Oct 77 198p

Journal Announcement: GRAI7725; NSA0200

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S.
customers); (703)605-6000 (other countries); fax at (703)321-8547; and
email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road,

Springfield, VA, 22161, USA.
NTIS Prices: PC A09/MF A01

...Descriptors: Sea geothermal field; Air pollution; Air quality; Baseline ecology; Carbon dioxide; Chemical analysis; Chemical composition; *Crops*; Environmental effects; Ethane; *Gases*; Ground subsidence; Ground water; *Growth*; *Hydrogen*; *Hydrogen sulfides*; I codes; Kgra; Legal aspects; Mathematical models; Methane; Nitrogen; Remote sensing; Research programs; Sampling...

2/3,K/4 (Item 1 from file: 8)

DIALOG(R)File 8:EI Compendex(R)
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

01455927 E.I. Monthly No: EIM8311-082115

Title: EFFECTS OF H//2S ON CROP AND FOREST PLANTS.
Author: Thompson, C. Ray; Kats, G.; Dawson, P. J.
Corporate Source: Univ of California, Statewide Air Pollution Research Cent, Riverside, Calif, USA
Conference Title: Geothermal Energy: Turn on the Power! , Transactions, Volume 6, Geothermal Resources Council, 1982 Annual Meeting.
Conference Location: San Diego, Calif, USA Conference Date: 19821011
E.I. Conference No.: 03124
Source: Transactions - Geothermal Resources Council v 6. Publ by Geothermal Resources Council, Davis, Calif, USA p 521-524
Publication Year: 1982
CODEN: TGRCD7 ISSN: 0193-5933 ISBN: 0-934412-56-1
Language: English

Identifiers: CONTINUOUS FUMIGATION STUDIES WITH HYDROGEN SULFIDE *GAS*; DEVELOPMENT OF LEAF LESIONS AND DEFOLIATION; REDUCED *GROWTH* AND DEATH OF SENSITIVE SPECIES; STUDIES AT 3,000 AND 300 PARTS PER BILLION OF *HYDROGEN* SULFIDE; LOWER LEVELS OF *HYDROGEN* SULFIDE CAUSING STIMULATION IN *GROWTH* OF SOME *CROPS*; STIMULATED *GROWTH* AT CERTAIN TIMES OF YEAR; 50 PARTS PER BILLION OF CARBON DIOXIDE OVERCOMING GROWTH REDUCTION...

2/3,K/5 (Item 2 from file: 8)

DIALOG(R)File 8:EI Compendex(R)
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

00533833 E.I. Monthly No: EI7604021626 E.I. Yearly No: EI76002145

Title: RESPONSE OF PLANT FRUITING TO HYDROGEN FLUORIDE FUMIGATION.
Author: Pack, M. R.; Sulzbach, C. W.
Corporate Source: Wash State Univ, Pullman
Source: Atmospheric Environment v 10 n 1 1976 p 73-81
Publication Year: 1976
CODEN: ATENBP ISSN: 0004-6981
Language: ENGLISH

Abstract: Plants of ten species, representing important *crops* grown primarily for fruit or seed production, were exposed to *hydrogen* fluoride (HF) *gas* in *growth* chambers and fruiting was evaluated. Soybean produced almost no seeds under continuous exposure to HF...

2/3,K/6 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2003 Inst for Sci Info. All rts. reserv.

00376290 Genuine Article#: DK166 No. References: 36

Title: TEMPERATURE-DEPENDENCE OF REACTIONS OF THE NITRATE RADICAL WITH ALKANES

Author(s): BAGLEY JA; CANOSAMAS C; LITTLE MR; PARR AD; SMITH SJ; WAYGOOD SJ

; WAYNE RP
Corporate Source: UNIV OXFORD, PHYS CHEM LAB, S PARKS RD/oxford
OX13QZ//ENGLAND//; UNIV OXFORD, PHYS CHEM LAB, S PARKS RD/oxford
OX13QZ//ENGLAND/
Journal: JOURNAL OF THE CHEMICAL SOCIETY-FARADAY TRANSACTIONS, 1990, V86,
N12, P2109-2114
Language: ENGLISH Document Type: ARTICLE

...Research Fronts: 1,2,4-TRIOXANES)
88-0594 001 (KINETIC MODELING OF ETHYLENE OXIDATION; HYDROXYL RADICALS;
UNBURNED *GAS* TEMPERATURES IN AN INTERNAL-COMBUSTION ENGINE;
HYDROGEN-ATOM ABSTRACTION)
88-0709 001 (AMBIENT OZONE; *YIELD* OF AGRICULTURAL *CROPS*; STRESS
INTERACTION FOR FIELD-GROWN ALFALFA)
88-1402 001 (GAS-PHASE REACTION OF HYDROXYL RADICALS...

2/3,K/7 (Item 1 from file: 47)
DIALOG(R)File 47:Gale Group Magazine DB(TM)
(c) 2003 The Gale group. All rts. reserv.

06433764 SUPPLIER NUMBER: 80607136 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The other global pollutant: nitrogen proves tough to curb: experts call for
international cooperation to slash nitrogen pollution, which they say
ranks with greenhouse gases as an environmental threat. (Environmental
Policy). (Statistical Data Included)
Kaiser, Jocelyn
Science, 294, 5545, 1268(2)
Nov 9, 2001
DOCUMENT TYPE: Statistical Data Included ISSN: 0036-8075
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 1258 LINE COUNT: 00103

... discovery of the Haber-Bosch process, still used today to convert
inert (N₂) *gas* and *hydrogen* to ammonia (a reactive form of
nitrogen that plants can use), spurred a leap in global *crop* *yields*.
But even by 1970, a few researchers foresaw a potential downside, as the
amount of...

2/3,K/8 (Item 1 from file: 103)
DIALOG(R)File 103:Energy SciTec
(c) 2003 Contains copyrighted material. All rts. reserv.

02345406 NOV-89-057175; EDB-89-091375
Title: Methanol from biomass
Author(s): Browne, S.; Neill, D.R.; DeAlmeida, C.; Phillips, V.; Xu, X.
; Takahashi, P.; Coleman, M.J.
Affiliation: Hawaii Natural Energy Institute, Univ. of Hawaii, Honolulu, HI
(US)
Title: Solar '88 (Technical Papers)
Conference Title: Solar '88: American Solar Energy Society annual meeting
and 13th national passive solar conference
Conference Location: Cambridge, MA, USA Conference Date: 18 Jun 1988
Publisher: American Solar Energy Society, Boulder, CO
Publication Date: 1988
p 462-468
Report Number(s): CONF-880615-
Language: English

...Abstract: fuels in the near-term: (1) the biofuel production
program-production of a medium Btu *gas* and conversion to methanol
from a feedstock of short-rotation tree and grass *crops*; (2) the
hydrogen-from-renewable energy program-enhancement of methanol
yield by the addition of *hydrogen* which more than doubles methanol

2/7/11 (Item 1 from file: 353)
DIALOG(R)File 353:Ei EnCompassPat(TM)
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

0084111 EnCompassPat Document No.: 7455231 Derwent WPI Accession No.:
74-53807V

**UNSATD. GASEOUS HYDROCARBON APPLICATION TO PLANT ROOTS - FOR INCREASING
CROP YIELDS, OPT ADDED WITH A MAJOR AMT. OF ANHY. AMMONIA**

Patent Assignee: INT MINERALS + CHEM CORP

Patent (CC, No, Date): CA 950696 740709

Ei EnCompassPat Bulletin Headings: AGRICULTURALS; CHEMICAL PRODUCTS;
FERTILIZERS; OTHER AGRICULTURALS; PURE HYDROCARBONS

?

/7/5 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

00533833 E.I. Monthly No: EI7604021626 E.I. Yearly No: EI76002145

Title: RESPONSE OF PLANT FRUITING TO HYDROGEN FLUORIDE FUMIGATION.

Author: Pack, M. R.; Sulzbach, C. W.

Corporate Source: Wash State Univ, Pullman

Source: Atmospheric Environment v 10 n 1 1976 p 73-81

Publication Year: 1976

CODEN: ATENBP ISSN: 0004-6981

Language: ENGLISH

Journal Announcement: 7604

Abstract: Plants of ten species, representing important *crops* grown primarily for fruit or seed production, were exposed to *hydrogen* fluoride (HF) *gas* in *growth* chambers and fruiting was evaluated. Soybean produced almost no seeds under continuous exposure to HF at 0. 64 MU g F m** MINUS **3, whereas cotton showed no apparent effects of 8. 0 MU g F m** MINUS **3. In order of decreasing sensitivity of fruiting to HF, bell pepper, sweet corn, cucumber, pea, grain sorghum, oat, wheat and barley ranked between soybean and cotton. Development of fewer seeds was the most common response of fruiting to HF. Flower development was inhibited on pepper and corn plants. The effects on fruiting apparently were independent of HF injury to the plant foliage. 20 refs.

?

: production; and (3) the methanol demonstration program-- performance
and emissions...

2/3,K/9 (Item 1 from file: 180)
DIALOG(R)File 180:Federal Register
(c) 2003 format only The DIALOG Corp. All rts. reserv.

DIALOG Accession Number: 02244442 Supplier Number: 920603701

Air Contaminants

Volume: 57 Issue: 114 Page: 26002

CITATION NUMBER: 57 FR 26002

Date: FRIDAY, JUNE 12, 1992

2/3,K/10 (Item 1 from file: 240)
DIALOG(R)File 240:PAPERCHEM
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

00122889 PAPERCHEM NO: AB4806948

CHANGES IN STRUCTURAL ELEMENTS OF COTTON LIGNIN ACCORDING TO GROWTH PERIODS

Veksler, N. A.; Smirnova, L. S.; Abduaizimov, Kh. A

SOURCE: Khim. Prirod. Soed. no. 1: 100-107 (1977). [Russ.] cf. ABIPC 47: abstr. 4765.

...DESCRIPTORS: DEGRADATION; CHEMICAL REACTIONS; CHEMICAL TESTS; CHROMATOGRAPHY; COTTON; COUMARINS; DEGRADATION; ETHOXYL GROUPS; ETHYL GROUPS; ETHYLATION; FARM *CROPS*; FLOWERS; *GAS* CHROMATOGRAPHY; *GROWTH*; GUAIACYL GROUPS; *HYDROGEN* COMPOUNDS; HYDROXIDES; LACTONES; LIGNINS; LIQUEFIED *GAS*; METALS; METHOXYL GROUPS; NATURAL FIBERS; NITRO COMPOUNDS; NITROBENZENE; NITROGEN COMPOUNDS; ORGANOSOLV LIGNINS; OXIDATION; OXYGEN HETEROCYCLES...

2/3,K/11 (Item 1 from file: 353)
DIALOG(R)File 353:Ei EnCompassPat(TM)
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

0084111 EnCompassPat Document No.: 7455231 Derwent WPI Accession No.: 74-53807V

UNSATD. GASEOUS HYDROCARBON APPLICATION TO PLANT ROOTS - FOR INCREASING CROP YIELDS, OPT ADDED WITH A MAJOR AMT. OF ANHY. AMMONIA

Patent Assignee: INT MINERALS + CHEM CORP

Priority (CC, No, Date): US 820651 690430; XX 22032 700323

Patent (CC, No, Date): CA 950696 740709

...Index Terms: C2; DRY; *ETHYLENE; *FERTILIZER; FRUIT; *GAS*; GRAIN *CROP* ; GROUP VA; **GROWTH* REGULATOR; *HYDROCARBON; *HYDROGEN*; IDE; *MONOOLEFINIC; NITROGEN; PLANT (BOTANY...

2/3,K/12 (Item 1 from file: 354)
DIALOG(R)File 354:Ei EnCompassLit(TM)
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

640760 EnCompassLit Document No.: 200004868

A study of volatile sulfur gases produced from the reduction of ethyl sulfate in paddy soil

Author: Yang Z.; Wang L.; Zhang J.; Xi S.

Corporate Source: Dept. of Chemistry and Biochemistry, Texas Tech University; Dept. of Envntl. Sci. and Engineering, Nanjing Univ. of Sci. and Technology

Source: ACS Division of Environmental Chemistry, Preprints 40/1 401-403 (ISSN 0093-3066) (2000)

Language: English

ISSN: 0093--3066

CODEN: ACEPC

Journal Name: ACS Division of Environmental Chemistry, Preprints

Document Type: JOURNAL ARTICLE; ABSTRACT; MEETING PAPER

Publication Date: 000000

...Assigned Terms: CARBON DISULFIDE; CARBONYL SULFIDE; CONCENTRATION; *ETHYL SULFATE; *GAS*; GRAIN *CROP*; *GROWTH*; *HYDROGEN* SULFIDE; LIGHT; MEETING PAPER; METHANETHIOL; METHYL SULFIDE

...Index Terms: CONCENTRATION; CROP; ELECTROMAGNETIC WAVE; *ETHYL SULFATE; *GAS*; GRAIN *CROP*; GROUP IVA; GROUP VIA; *GROWTH*; *HYDROGEN*; *HYDROGEN* SULFIDE; IDE; LIGHT; MEETING PAPER; METHANETHIOL

2/3,K/13 (Item 2 from file: 354)

DIALOG(R)File 354:Ei EnCompassLit(TM)

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0276292 EnCompassLit Document No.: 2830418

EFFECTS OF GASEOUS HYDROGEN FLUORIDE ON THE YIELD OF FIELD-GROWN WHEAT

Author: MACLEAN D C; SCHNEIDER R E

Corporate Source: BOYCE THOMPSON INST. CORNELL UNIV.

Source: ENVIRON. POLLUT., SER. A V24 N.1 39-44 (JAN. 1981)

Language: English

Publication Date: 810100

...Index Terms: BIOMEDICAL TECHNIQUE; COMPOSITION; CONCENTRATION; CONTROL; **CROP*; EXPOSURE; *FLUORINE; *GAS*; *GRAIN *CROP*; *GROUP VIIA; *GROWTH*; HEALTH/DISEASE; **HYDROGEN*; **HYDROGEN* FLUORIDE; *IDE; INJURY; LEAF; METABOLISM

2/3,K/14 (Item 1 from file: 660)

DIALOG(R)File 660:Federal News Service

(c) 2002 Federal News Service. All rts. reserv.

00172964 SUBFILE: FNS

TITLE: PREPARED TESTIMONY OF
SENATOR TOM HARKIN

BEFORE THE SENATE ENERGY AND NATURAL RESOURCES COMMITTEE,
ENERGY RESEARCH AND DEVELOPMENT SUBCOMMITTEE

RE: THE HYDROGEN FUTURE ACT OF 1995

WEDNESDAY, MARCH 20, 1996

SECTION HEADING: Capitol Hill hearing

DATELINE: Washington dateline general news

FILING DATE: 960320 YEAR: 1996

APPROXIMATE WORD COUNT: 002194 APPROXIMATE LINE COUNT: 00199

...TEXT: sustainably. Gasification of biomass is presently one of the most promising sustainable methods of producing *hydrogen*, although it has not been thoroughly tested. Biomass such as woody *crops* and switchgrass can be heated to drive off *hydrogen*-rich *gases*. These *gases* can then be mined into pure *hydrogen* just as natural *gas* is turned into hydrogen. The carbon dioxide produced, however, is reabsorbed by the *growth* of new biomass...

?

09644447 SUPPLIER NUMBER: 16962513 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Refining reforming technology. (hydrocarbon reforming)
Nitrogen, n214, p38(16)
March-April, 1995
ISSN: 0029-0777 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 9911 LINE COUNT: 00838

... NOT REPRODUCIBLE IN ASCII)

The cost advantage of the Tandem reformer is much greater for *plants* producing methanol or *hydrogen* plus CO synthesis *gas* from natural gas feed, because these plants must produce 50% more hydrogen than they need...steam reforming for about 40 years. The company has designed approximately 150 tubular reformers for *plants* producing ammonia, methanol, *hydrogen*, oxosynthesis *gas*, carbon monoxide and town gas. Topsoe has also manufactured and supplied catalysts for all types...higher stoichiometric number results in a less efficient and more expensive plant due to the *increased* *amount* of synthesis gas to be handled(7).

The extent of conversion of hydrocarbons into hydrogen...

9/3,K/5 (Item 4 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2003 The Gale Group. All rts. reserv.

06772908 SUPPLIER NUMBER: 14673309 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Soy! It's no ordinary bean. (part 2)
Gerriets, Marcie; Cooke, Linda; Wood, Marcia
Agricultural Research, v41, n11, p10(7)
Nov, 1993
ISSN: 0002-161X LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 3798 LINE COUNT: 00301

... of soybeans by means of plant breeding.

So, for years, processors hydrogenated--that is, bubbled *hydrogen* *gas* through--*soybean* oil to prevent the breakdown of linolenic acid. For the most part, industry still relies...that discourage soybean consumption."

In 1988, University of Minnesota scientists found that removing these sugars *increased* the *amount* of metabolizable energy derived from the soymeal in the feed. So Kuo decided to search...
?

9/3,K/1 (Item 1 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2003 Resp. DB Svcs. All rts. reserv.

01068969

KTI rises with reforms

(KTI India sees 1993 turnover of some US\$5 mil, enhanced by economic reforms)

Asia-Pacific Chemicals, v 5, n 9, p 40

November 1994

DOCUMENT TYPE: Journal ISSN: 0960-2739 (United Kingdom)

LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT:

...project management, engineering and fabrication and has designed and constructed reforming units, hydrocarbon cracking installation, *hydrogen* *plants*, inert *gas* generators and refinery furnaces. Economic reforms have *enhanced* the company's *growth*. In 1993, it had turnover of some US\$5 mil, and expects 1994 turnover to...

9/3,K/2 (Item 1 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2003 The Gale Group. All rts. reserv.

14793680 SUPPLIER NUMBER: 86708859 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Hydrogen. (Gas Processes 2002).

Hydrocarbon Processing, 81, 5, 88(9)

May, 2002

ISSN: 0018-8190 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 6405 LINE COUNT: 00555

... reforming.

Feedstocks: Ranging from natural gas to heavy naphtha as well as potential refinery off *gases*. Many recent refinery *hydrogen* *plants* have multiple feedstock flexibility, either in terms of back-up or alternative or mixed feed...flexibility.

The CO in the reformed gas is shift-converted with an iron-chromium catalyst, *increasing* hydrogen *yield* and reducing CO content to below 3-vol.%. The shift gas is cooled to 40...

9/3,K/3 (Item 2 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2003 The Gale Group. All rts. reserv.

10243377 SUPPLIER NUMBER: 20766091 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Gas processes '98. (process descriptions for hydrocarbons)

Hydrocarbon Processing, v77, n4, p85(35)

April, 1998

ISSN: 0018-8190 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 22140 LINE COUNT: 01882

... potassium carbonate-based system that is used in bulk C(O.₂) removal in *hydrogen* *plants* and natural *gas* applications. The system is also compatible with (H.₂)S. The gases can be...leads to a net gain of valuable gas plus the recycled C(O.₂) *increasing* power *output* of the gas turbine. Thus increasing overall efficiency of the IGCC plant.

Material balance for...quench or syngas cooler raises feedstock thermal efficiency to about 90% to 94%. Recycling soot *increases* *yield* of (H.₂) + CO without increasing specific oxygen consumption. When extraction naphtha is used...

9/3,K/4 (Item 3 from file: 148)